



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

September 1, 2015

Mr. William R. Gideon
Vice President
Duke Energy Progress, Inc.
Brunswick Steam Electric Plant
P.O. Box 10429
Southport, NC 28461

**SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR BRUNSWICK STEAM ELECTRIC
PLANT, UNITS 1 AND 2 – NRC INSPECTION REPORT 05000325/2015005
AND 05000324/2015005**

Dear Mr. Gideon:

On August 12, 2015, the Nuclear Regulatory Commission (NRC) completed its mid-cycle performance review of Brunswick Steam Electric Plant, Units 1 and 2. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from July 1, 2014, through June 30, 2015. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility. This performance review and enclosed inspection plan do not include security information.

The NRC determined that overall, Brunswick Steam Electric Plant, Units 1 and 2 operated in a manner that preserved public health and safety and met all cornerstone objectives. The NRC determined the performance at Brunswick Steam Electric Plant, Units 1 and 2, during the most recent quarter was within the Licensee Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because all inspection findings had very low (i.e., green) safety significance, and all PIs indicated that your performance was within the nominal, expected range (i.e., green). Therefore, the NRC plans to conduct ROP baseline inspections at your facility.

The enclosed inspection plan lists the inspections scheduled through June 30, 2017. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the second half of the inspection plan are tentative and may be revised at the end-of-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes. This inspection plan does not include security-related inspections, which will be sent via separate, non-publicly available correspondence.

We also plan on conducting the following infrequently performed inspection: Operator Licensing Initial Exams.

In response to the accident at Fukushima, the Commission issued Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events." This Order requires licensees to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities following a beyond-design-basis external event. Additionally, the Commission issued Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation." This Order requires licensees to have a reliable means of remotely monitoring wide-range Spent Fuel Pool levels to support effective prioritization of event mitigation and recovery actions in the event of a beyond-design-basis external event. The NRC is conducting audits of licensee efforts towards compliance with these Orders. The audit was completed for the Brunswick Steam Electric Plant, and the information gathered will aid staff in development of the ultimate Safety Evaluation for the site. After the NRC staff receives the Final Compliance letter for the site, the Final Safety Evaluation will be issued. Then, the NRC staff will confirm through inspections, the full implementation of the orders mentioned above performing TI 191, "Inspection of the Implementation of Mitigation Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communication/Staffing/Multi-Unit Dose Assessment Plans."

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's Agencywide Document Access and Management System (ADAMS). ADAMS is accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please contact George Hopper at (404) 997-4645 with any questions you may have regarding this letter.

Sincerely,

/RA/

George T. Hopper, Chief
Reactor Projects Branch 4
Division of Reactor Projects

Docket Nos.: 50-325, 50-324
License Nos.: DPR-71, DPR-62

Enclosure:
Brunswick Inspection/Activity Plan
(09/01/2015 – 06/30/2017)

cc: Distribution via ListServ

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PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE NON-SENSITIVE
ADAMS: Yes ACCESSION NUMBER: _____ SUNSI REVIEW COMPLETE FORM 665 ATTACHED

OFFICE	RII:DRP	RII:DRP	RII:DRP				
SIGNATURE	DXW4	JSD	GTH				
NAME	DJackson	JDodson	GHopper				
DATE	8/28/2015	8/21/2015	8/31/2015				
E-MAIL COPY?	YES NO	YES NO	YES NO				

W. Gideon

3

Letter to William R. Gideon from George T. Hopper dated September 1, 2015.

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ROP Assessment

ROP Reports

Institute of Nuclear Power Operations (INPO)

Brunswick
Inspection / Activity Plan
09/01/2015 - 06/30/2017

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			OL EXAM - INITIAL LICENSE EXAM PREP		3
1	11/02/2015	11/06/2015	V23431	BRUNSWICK/NOVEMBER 2015 INITIAL EXAM AT POWER FACILITIES	
			OL EXAM - INITIAL LICENSE EXAM		3
1	11/30/2015	12/11/2015	V23431	BRUNSWICK/NOVEMBER 2015 INITIAL EXAM AT POWER FACILITIES	
			ISI - UNIT 1 IN-SERVICE INSPECTION		1
1	03/07/2016	03/11/2016	IP 7111108G	Inservice Inspection Activities - BWR	
			RP - RAD HAZARDS AND TRANSPORTATION		2
1, 2	03/07/2016	03/11/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	03/07/2016	03/11/2016	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
			RP - RP PUBLIC RAD SAFETY BASELINE		2
1, 2	05/23/2016	05/27/2016	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1, 2	05/23/2016	05/27/2016	IP 71124.07	Radiological Environmental Monitoring Program	
1, 2	05/23/2016	05/27/2016	IP 71151	Performance Indicator Verification	
			EP - EP EXERCISE INSPECTION		6
1, 2	07/25/2016	07/29/2016	IP 7111401	Exercise Evaluation	
1, 2	07/25/2016	07/29/2016	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1, 2	07/25/2016	07/29/2016	IP 7111408	Exercise Evaluation – Scenario Review	
1, 2	07/25/2016	07/29/2016	IP 71151	Performance Indicator Verification	
			OL RQ - REQUAL INSP		2
1, 2	10/17/2016	10/21/2016	IP 7111111B	Licensed Operator Requalification Program	
			CDBI - COMPONENT DESIGN BASES INSPECTION		7
1, 2	10/17/2016	10/21/2016	IP 7111121	Component Design Bases Inspection	
1, 2	11/14/2016	11/18/2016	IP 7111121	Component Design Bases Inspection	
1, 2	11/28/2016	12/02/2016	IP 7111121	Component Design Bases Inspection	
1, 2	12/12/2016	12/16/2016	IP 7111121	Component Design Bases Inspection	
			TFPI - TRIENNIEL FIRE PROTECTION INSPECTION		4
1, 2	01/23/2017	01/27/2017	IP 7111105T	Fire Protection [Triennial]	
1, 2	02/06/2017	02/10/2017	IP 7111105T	Fire Protection [Triennial]	
			ISI - UNIT 2 IN-SERVICE INSPECTION		1
2	03/13/2017	03/17/2017	IP 7111108G	Inservice Inspection Activities - BWR	
			RP - RAD HAZARDS AND PIV		1
1, 2	03/20/2017	03/24/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	03/20/2017	03/24/2017	IP 71151	Performance Indicator Verification	

This report does not include INPO and OUTAGE activities.
This report shows only on-site and announced inspection procedures.

Enclosure

**Brunswick
 Inspection / Activity Plan
 09/01/2015 - 06/30/2017**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
PI&R - PROBLEM IDENTIFICATION AND RESOLUTION					
1, 2	05/08/2017	05/12/2017	IP 71152B	Problem Identification and Resolution	5
1, 2	05/22/2017	05/26/2017	IP 60851	Design Control Of ISFSI Components	

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 This report shows only on-site and announced inspection procedures.

Enclosure